

SIGMA XI QUARTERLY

Vol. XIV

SEPTEMBER, 1926

No. 3



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SIGMA XI QUARTERLY

EDITORIAL COMMITTEE

FLOYD KARKER RICHTMYER
EDWIN EMERY SLOSSON

HENRY BALDWIN WARD
EDWARD ELLERY

VOL. XIV

SEPTEMBER, 1926

No. 3

EDITORIALS

It is necessary that at least one number of the Quarterly be given almost exclusively to the business of the Society. The Quarterly is the one avenue of approach to the five thousand and more individuals enrolled in forty-five chapters of the national organization. This issue has been delayed in publication in order that many important matters could be brought to the attention of our membership. Among those items is naturally the semi-annual meeting of the Executive Committee. Ordinarily held in May, it was necessary this year to postpone the meeting until October in order that the Society might have the benefit of the counsel of the entire Executive Committee, several members of which did not return to this country from Europe until early October. The entire membership is asked to read the minutes of that meeting which was held in New York City, October 22.

* * * * *

The Annual Convention of the Society will be held in Philadelphia, Tuesday, December 28, in connection with the meetings of the American Association for the Advancement of Science. The Convention proper will convene at two o'clock in the afternoon of that day, and all the chapters are urged to send delegates. Each chapter is entitled to a representation of not more than three delegates.

The Executive Committee expects to present to the Convention formal petitions for charters from groups at the University of Maryland, the University of Arizona, and Michigan State Agricultural College. The Committee will further ask for favorable action of the Convention on two changes in the Constitution. One of these concerns the expansion of the Executive Committee to include the retiring president, to hold office for two years; the other provides

for the election of alumni associates, being an addition to Section 6 of Article III of the present Constitution. Section 1 (b) of Article III of the Constitution mentions alumni associates, but none of the sections makes provision for their election.

The Executive Committee will ask the Convention to waive the constitutional requirement of a ninety days' notice of these proposed amendments, since under the peculiar circumstances attending the mid-convention meeting it has not been possible to formulate the proposed amendments and publish notice at an earlier date. It is hoped that the delegates will give their unanimous approval to the adoption of these amendments which the Executive Committee deem important in the further progress of the Society.

The Annual Convention Dinner will be held at 6:30 o'clock, following the business session, and the Fifth Annual Joint Meeting of Sigma Xi and the American Association for the Advancement of Science will convene at 8:45 in the evening. Announcement of the speaker for this meeting will be made both by the Association to its members and by the secretary of Sigma Xi through chapter secretaries.

* * * * *

The secretary's office has received from the chapter at the University of North Carolina a pamphlet of 108 pages in which is set forth the research in progress at the university from July 1925 to July 1926. The report covers a statement of the funds available for research and of the particular awards for the year. It gives in detail the problems studied, the methods used, and results obtained. It presents the contents of their research publications, the *Journal of the Elisha Mitchell Scientific Society*, the *North Carolina Law Review*, and *Social Forces*. It also describes the Graduate Club, and gives a report of its meetings as well as those of the chapter of Sigma Xi.

The secretary calls the attention of the chapters to this way of publishing research in progress at educational institutions for the purpose of asking that wherever similar reports are issued copies be sent to his office. The office of the national secretary might well serve as a sort of clearing house of information regarding research at the universities in the United States. That is a topic that has been under discussion more than once at meetings of the Executive Committee. The Society could add this to the other useful services it is rendering the cause of research in this country. It is clearly another way in which it may realize its object, namely, the promotion of research.

* * * * *

The June Quarterly contained the reports from the holders of Sigma Xi Fellowships for the year 1925-26 as well as a statement of awards for the current year. Supplementary to the reports of the Fellows, we are permitted to make the following quotation from a letter sent us by Professor Bogert of Columbia University, who is conducting research on Quinazolines with a view of determining their physiological properties. The pharmacological tests on the Cincophen analog which Professor Bogert has synthesized are being continued by Dr. R. G. Turner of the University of Iowa, who writes Professor Bogert as follows:

We are pleased with the results obtained by the material which you sent us. Its effect in lowering blood uric acid is without doubt positive, but we are not absolutely sure as yet in regard to its effect on urinary uric acid.

And Professor Bogert adds:

It looks as though we are opening up a field which may lead to some worthwhile results, although of course it is too early as yet to venture any prophecies.

Members of Sigma Xi, especially those who are contributing to the Alumni Fund from which Fellowships are awarded, will be gratified to know of the important and valuable work made possible by this Fellowship movement of the Society.

* * * * *

The secretary asks for the careful reading of his report to the Executive Committee—the first he has been able to make since assuming office. It explains itself and sets forth some of the difficulties under which he labors. The attention of chapter secretaries is especially called to those parts of the report dealing with the data which they send for the records of the Society.

* * * * *

We are glad to welcome to the companionship of Sigma Xi clubs the club at the University of Florida, organized in 1925; and the club at the University of Rochester, organized in 1925. Officers of both of these clubs appear in the list on the last page of the Quarterly.

* * * * *

The Executive Committee desires to acknowledge the receipt of twenty-five dollars from the Sigma Xi Club at the University of Oklahoma toward the Fellowship Fund. This club has made a practice of showing its interest in the affairs of the Society in this generous way. It is functioning both as an organization in an educational institution and as an alumni group desiring to participate in alumni activities.

MINUTES OF THE EXECUTIVE COMMITTEE MEETING

The meeting of the Executive Committee, postponed from last spring, was held in the Engineering Societies Building, New York City, Friday, October 22, 1926. The meeting was called to order at 10 o'clock by President Moulton. Those present were: President Moulton, Secretary Ellery, Treasurer Pegram, Professor McClung, Dr. Kellogg, Dr. Durand, Dr. Whitney, Mr. Davies. Professor Ward, who had expected to be present, was unavoidably prevented at the last moment from coming. Professor Richtmyer, Past-President, was present by invitation.

1. Keys and Pins:

a. The Kansas City Convention authorized the issuance of keys through the secretary's office just as associate emblems are issued, but the date at which such action should be effective was left, with power, to the decision of the Executive Committee. The Committee voted that the action of the Convention should be effective January 1, 1927, and instructed the secretary, in putting the Convention action into operation, to protect local jewelers who may have keys in stock.

b. The secretary was instructed to bring about an improvement in the quality of the associate emblems.

2. Certificates for Charter Members:

The secretary reported an inquiry from one of the recently installed chapters regarding the issuance of special membership certificates for charter members. The secretary was instructed to conform to the Constitution, which provides for certificates for members and associates only.

3. Conference of Honorary Fraternities:

The secretary referred to the proposal made at a previous meeting of the Committee by representatives from Phi Beta Kappa and Alpha Omega Alpha that a conference of Honorary Fraternities be organized, and stated that such organization was effected in Kansas City in December 1925. Dr. Francis W. Shepardson was made president and Henry B. Ward, William W. Root, Arthur D. Moore, Floyd K. Richtmyer, Oscar M. Voorhees were chosen as directors. Further

meetings of such a conference have been suggested, but none has, as yet, been held.

4. *Change of Name of Chapters:*

a. A petition was read from the Ames Chapter as follows:

WHEREAS: The official name of our institution is the Iowa State College, and

WHEREAS: The name Ames does not apply to the Iowa State College in any official way, but is merely the name of the city in which the college is located, and

WHEREAS: The chapters of Sigma Xi are known by the names of the institutions at which they are located, and

WHEREAS: There will be no confusion resulting from the use of the name Iowa State Chapter of Sigma Xi for the chapter at Iowa State College

Resolved, That we petition and urge the Executive Committee of the National Society of the Sigma Xi to change the name of the Ames Chapter to the "Iowa State Chapter," the change to be effective as soon as approved.

After careful consideration, the Committee

VOTED: To recommend to the Ames Chapter that its name be Iowa State College Chapter, subject to the consent of the chapter.

b. The secretary was instructed to consult the Iowa Chapter regarding the change of its name from "Iowa" to the University of Iowa Chapter.

5. *Changes in the Constitution:*

It was voted to recommend to the chapters the adoption of the following changes in the Constitution:

a. Art. VII, Sec. 1

Line 3: change "nine" to "ten"

Line 4: strike out "and" and substitute a comma.

Line 4: after the word "Committee" insert "and the Retiring President,"

so as to make the section read:

Section 1. (a) The officers of the Society shall be a President, a Secretary, a Treasurer, and an Executive Committee of ten, of which the President, the Secretary, the Treasurer, the Chairman of the Alumni Committee and the Retiring President shall be ex-officio members.

Professor McClung, who was requested by the Committee at the December 1925 meeting to recommend a policy for the election of alumni associates reported as follows:

Provision is made in the Constitution for the election of extra-mural alumni members, Article III, Sec. 6. The purpose of this provision is to make the work

of any chapter as broad and effective as possible through the association with it of investigators in neighboring institutions who would naturally be members if they were connected at the site of the chapter. This plan worked very satisfactorily at Pennsylvania where faculty members from a number of colleges and research institutions became actively associated with the work of the chapter. It now appears that it would be possible to extend the influence of this Society and further its purposes by the occasional election of very promising beginning investigators to associate membership, although they may be connected with other schools nearby. I was therefore directed to bring this matter to the attention of the Executive Committee and to ask that a constitutional change be made to provide for alumni associate membership by election. The action of the Executive Committee was to appoint me a committee of one to draw up such a proposed change for consideration. Accordingly, it is suggested that to Article III there be added Section 7, which shall read:

Section 7. Eligibility: Alumni associate members (by election). The following and no others are eligible to election as alumni associate members of the Society: Any professor, instructor, investigator, or student connected with a neighboring educational, scientific, or professional institution, not having a chapter, who otherwise would be eligible for associate membership on the conditions prescribed in Section 4 of this Article.

6. *The Quarterly:*

a. The secretary was instructed to act as far as possible upon the suggestions from chapters regarding contents of Quarterly.

b. Dr. Kellogg was appointed a committee to confer with "Science Service" with reference to the possibility of coöperation between that organization and the Sigma Xi Quarterly.

7. *Additional Names on Petitions for Charters:*

The secretary brought up the question proposed by one of the recently installed chapters regarding the addition of a name to the petition for the charter after the Convention had definitely acted upon the petition.

It was voted that inasmuch as the Convention grants a charter to the group as named in the petition, the Committee has no authority to make additions to the list.

8. *Sigma Xi Clubs:*

At the December 1925 meeting Mr. Davies and Professor Richter were appointed a sub-committee to present regulations for the guidance of Sigma Xi clubs. The Committee presented their report which was received and adopted. (Printed in full on page 71 of this issue.)

9. *Election of Members by Chapters:*

A letter from a member of a chapter called attention to the method of electing members in chapters having a membership of twenty-five or more (Art. IV, Sec. 2 (d) of the Constitution), stating that a recommendation by the Board of Electors could be held up by a single adverse vote, and raising the question whether the Society intended that so much power should be put into the hands of a single individual.

The Committee called attention to the fact that this method of electing members is optional and not mandatory, and that any chapter may elect to membership on the basis of the preceding paragraphs of Sec. 2, Art. IV, of the Constitution.

10. *The Convention:*

The secretary reported that the Annual Convention of the Society will be held in Philadelphia on the afternoon of December 28.

The Committee voted to hold its next meeting on the evening of December 27, following the opening session of the Convention of the American Association for the Advancement of Science.

11. *Fellowships:*

The secretary reported that the Fellowship Committee, consisting of Dr. W. R. Whitney, Chairman, Dr. E. L. Thorndike, and Dr. John H. Northrup, had awarded Fellowships for the current year. (Reported in Quarterly, June 1926.)

12. *Incorporation:*

Mr. Davies of the sub-committee on incorporation reported that all the preliminary steps had been taken toward incorporating the society in the District of Columbia, and that it was expected that the Society would be duly incorporated in the near future in accordance with Sub-Chapter III of Chapter XVIII of the Code of Law for the District of Columbia.

13. *Report of the Work of the Secretary's Office:*

(This is printed in full on page 67 of this issue.)

14. *Adjourned for Luncheon:*

At luncheon the Committee had as guest Mr. W. E. Wickenden of the Society for the Promotion of Engineering Education, who gave a valuable and interesting resumé of the work on which he is engaged.

15. *Petitions and Inquiries were considered from 14 institutions:*

The following actions were taken:

a. *Michigan State Agricultural College*

VOTED: That the petitioning group be invited to present a formal petition for action at the December 1926 meeting.

b. *University of Arizona*

VOTED: That the petitioning group be invited to present a formal petition for action at the December 1926 meeting.

EDWARD ELLERY, *Secretary*

REPORT OF THE SECRETARY TO THE EXECUTIVE COMMITTEE—OCTOBER 22

The secretary's office has had full time and efficient clerical service since July 1926. It is fitting that a report should be made to the executive committee and, through it, to the society at large regarding the nature of the work required and what has been accomplished.

I. THE QUARTERLY

A—The first problem to be attacked concerned the mailing lists and other matters connected with the publication of the official journal of the society.

It has been known for some time that the subscription list contained many discrepancies which sufficient clerical assistance would enable us to correct. Investigation confirmed our knowledge. The Quarterly was going to individuals who were not entitled to receive it as shown by comparison of returned covers with most recent chapter lists. "Returned" postal slips were also evidence that changes of address had not been reported to the secretary's office. In some cases it was found that reports from chapter secretaries of dues-paying members were not correct; and in other cases, that we had not been informed when members had ceased to become active in their chapters or had left their chapters.

On the other hand, the secretary was being constantly notified that the Quarterly was not reaching members who were entitled to receive it. Comparison with our lists indicated that one of the causes of this situation was the fact that the secretary's office had not been furnished with names and addresses of new members or of recent affiliations.

Good service in the secretary's office cannot work without material. The office has not been supplied promptly with the names of enrolled members. At this date, there are still four chapters whose secretaries have not sent in Quarterly mailing lists for 1926. In some instances, we discovered that the lists contained names of individuals for whom the office had no filing card or other record. It has even been found that some chapter officers and some delegates to conventions are not on record in the secretary's office as being members of the society.

Carelessness in submitting full names and permanent addresses of enrolled members has resulted in confusion of identity of hundreds of

individuals and lack of address or incomplete address of thousands. This means that these members are, temporarily at least, lost to the society.

There has always been a difference between the arrangement of the Quarterly mailing list in the publisher's office and of that in the secretary's office—the former being geographical and the latter alphabetical (as far as it could be made so). This alphabetical arrangement was the only one possible for us up to this year. Until recently, the only files that the secretary's office had were arranged by chapters, from which we endeavored to make an alphabetical file. These differences in method, in the offices of the publishers and the secretary, of listing enrolled members and subscribers gave ample opportunity for errors. (Regarding geographical list of total membership, see below.)

B—Measures taken to improve the situation:

About the first thing to be done was to arrange the lists in the secretary's office geographically. This would enable us to eliminate errors as between the publisher's list and ours. This would also be of help in the program which the executive committee has had in mind for some time—the making of a geographical list for the entire membership of the society. The many uses to which such a geographical list can be put need not be enumerated. The secretary's office has been in receipt of repeated requests from Sigma Xi members in various cities of the country for the names of other members resident in the vicinity. To date we have been unable to comply with the requests, but, with the completion of our geographical list (upon which the office is now at work), we can supply this information. It will be of immense value also to the alumni committee which is contemplating establishing Sigma Xi alumni centers distributed over the entire country.

Obviously, to make a correct geographical file, it is necessary to have a dependable alphabetical file.

The present subscription list for the Quarterly numbers more than 5550. It includes dues-paying members and associates, subscribers to the Fellowship Fund, direct subscribers, and exchanges. Every address on this list has been checked and the office is keeping the list correct to date according to information received. Names are dropped from the list when no removal notice is sent to us, or if the Quarterly is returned by the postmasters. Our geographical list is

made according to state, principal chapter centers, and miscellaneous or sectional distribution.

The secretary expresses the hope that the time will come when chapter reports of enrolled membership will reach him within certain definite periods of the year rather than, as now, any time during the calendar year, and that the card records submitted by chapter secretaries will give full and correct information.

II. FILES

A—Chapter Files:

As stated above, up to within very recent months, the only membership records in the secretary's office were arranged by chapters. The alphabetical file is now complete as far as it can be made under the circumstances. It is difficult to state in this brief report why the complete information on the membership cards is necessary and why omission of any item causes difficulty. It often happens that the field of work of two individuals of the same surname and Christian name is a basis for identification—quite as important as the full name and address. It goes without saying that membership cards sent in by the chapter secretaries should correspond with the Quarterly mailing list. It would surprise the chapters if they could all know how frequent are the discrepancies of this nature.

B—Alphabetical File:

The alphabetical file, exclusive of some 1925 and 1926 returns which are not yet in, numbers approximately 20,000 names. The office is constantly, and hard, at work in the effort to make this accurate and dependable. The difficulty in receiving correct information retards the task. It has been surprising to find that some of the addresses sent us by chapter secretaries are older than those we have already received in other ways. Of course, our membership file included the records of deceased members and it is not always easy to get information of the deaths of individuals. Since the chapter files are the basis of all the files in the secretary's office, in order to check the correctness of the alphabetical file, it was necessary to go over 20,000 cards once for each chapter—which means 45 times.

One of the results of all this work has been to show up the doubtful records. In the case of one chapter alone, 276 individuals were noted about whom our records were known to be incorrect; and the total of doubtful records in August 1926 was over 2600.

The work of keeping the files correct involves changing 3 cards for every change of address. A transfer of a member from one chapter to another means a notation on 3 cards.

C—Geographical File:

The office could not begin work on a geographical file of complete membership when the basic files were known to be incorrect. We therefore postponed the beginning of work on the geographical file until the chapter file could be brought into dependable condition. The secretary is glad to report at this time that, with chapter and alphabetical files approaching correctness, work on the geographical file is now in progress. He does not desire to raise false hopes in the minds of the alumni committee or of any of the members of the society that this part of the work will be completed sooner than it will be. If no unforeseen obstacles rise to delay this part of the work of the office, the geographical files ought to be completed by March 1, 1927.

III. OTHER ACTIVITIES OF THE SECRETARY'S OFFICE

The secretary wishes to call attention to the fact that this work on the society's records is in addition to the conduct of the regular business of the society: correspondence with chapters and possible petitioners for charters; ordering membership keys and associate membership emblems; issuing certificates; collecting the Fellowship Fund; editing the Quarterly.

INFORMATION FOR THE GUIDANCE OF SIGMA XI CLUBS

Organization and Purpose.—Alumni Members of Sigma Xi residing near together may organize a Sigma Xi Club, if in the judgment of the members concerned such a club would serve to promote the purposes for which the Society stands.

Name and Membership.—The organizing members may select for the Club any name which they wish, subject only to the restriction that the organization shall be called a Sigma Xi Club, as for example "The Sigma Xi Club of the Kansas State Agricultural College" or "The Sigma Xi Club of Manhattan" or "The Sigma Xi Club of Central Kansas."

The membership of a Sigma Xi Club shall be composed only of such Alumni Members and Associates of the Society as elect to join the Club. While the Club has no power to elect members or associates of the Society, or to admit to membership in the Club other than Alumni Members and Associates, there is no restriction to the extension of invitations to attend meetings. (It is to be pointed out, however, that membership in the Society is not prerequisite to joining in a petition for the establishment of a Chapter. Further, attention is called to the election of Alumni Members under the provisions of Art. III, Sections 6 (b) of the Constitution.)

Officers.—For the sake of uniformity, it is suggested that the officers of a Club, be a president, a vice-president, and a secretary-treasurer.

Activities.—Save in the election of members or associates, and in the sending of voting delegates to the annual convention of the Society, Clubs may have all the privileges of, and may undertake any of the activities customarily undertaken by chapters; such as the holding of scientific meetings, public or otherwise, the promotion of social relations among members, and the encouraging of scientific research in the community.

By-Laws.—Clubs may make such By-Laws as are not in conflict with the Constitution of the Society.

Dues.—Since the Alumni Fund is supported by the Alumni Members of the Society, members of Clubs are neither required nor expected to contribute directly to the general expenses of the Society. Accordingly, Clubs need provide only such dues as are necessary to meet their expenses. Clubs, however, are urged to assist the Alumni

Committee and the National Officers in securing and maintaining subscriptions to the Alumni Fund.

Contact with the National Society. Reports.—Clubs are urged to send annually to the National Secretary a report giving officers, membership statistics, activities, and other pertinent information.

Conventions.—Clubs are invited to send delegates, not to exceed two, for each Club, to the Annual Convention. Such delegates have a seat and voice, but no vote, on the floor of the Convention. The Alumni Members of the Society are represented in the Annual Convention by the Members of the Alumni Committee, each of whom has one vote.

The Quarterly.—The attention of Clubs is called to the Quarterly as a medium for obtaining information regarding the Society. Subscriptions, one dollar per year through the National Secretary.

CHAPTER OFFICERS

LIST FURNISHED BY THE CORRESPONDING SECRETARIES OF THE CHAPTERS

CHAPTER	PRESIDENT	VICE-PRES.	SECRETARY	TREASURER
Cornell.....	L. Knudson...	R. C. Gibbs...	R. Matheson...	A. J. Eames
Rensselaer...	A. W. Davison...	L. W. Clark...	E. M. Clark...	W. J. Williams
Union.....	P. I. Wold...	J. W. Mavor...	C. B. Hurd...	C. B. Hurd
Kansas.....	G. C. Shaad...	N. P. Sherwood...	G. W. Smith...	H. E. Jordan
Yale.....	C. R. Longwell...	G. E. Nichols...	Arthur Phillips...	Blair Saxton
Minnesota...	E. C. Stakman...	D. Jackson...	J. J. Willaman...	R. G. Green
Nebraska...	H. H. Marvin...	E. F. Schramm...	E. N. Andersen...	M. G. Gaba
Ohio.....	C. H. Kennedy...	J. H. Weaver...	J. E. Day...	S. E. Rasor
Pennsylvania...	W. H. F. Addison	T. D. Cope...	W. H. Barton, Jr.	W. R. Taylor
Brown.....	C. R. Archibald	S. T. Arnold...	Bradford Willard	C. R. Adams
Iowa.....	B. T. Baldwin...	P. A. Bond...	C. J. Lapp...	E. W. Chittenden
Stanford...	Leroy Abrams...	W. R. Eckart...	E. W. Schultz...	E. W. Schultz
California...	J. N. LeComte...	D. R. Hoagland...	T. D. Stewart...	A. C. Alvarez
Columbia...	D. W. Johnson...	R. S. Woodworth...	L. T. Work...	L. T. Work
Chicago...	H. G. Gale...	B. C. H. Harvey...	P. MacClintock...	P. MacClintock
Michigan...	E. M. Bragg...	H. M. Randall...	G. M. Ehlers...	A. B. Peck
Illinois...	J. W. Lloyd...	J. H. Reedy...	L. A. Adams...	L. E. Card
Case.....	J. C. Wattleworth	N. A. Lange...	C. F. Prutton...	T. M. Focke
Indiana.....	M. E. Hufford...	K. P. Williams...	W. A. Fletcher...	Paul Weatherwax
Missouri.....	W. A. Westfall...	W. A. Albrecht...	H. D. Hooker...	H. D. Hooker
Colorado...	F. E. E. Germann	W. C. Toepelman	C. F. Poe...	F. S. Bauer
		I. V. Wallin...		
Northwestern...	E. J. Moulton...	B. J. Spence...	A. J. Walcott...	Louise Otis
Syracuse.....	L. E. Wise...	C. L. Brightman...	V. Obreshkove...	O. Gelormini
Wisconsin...	F. C. Krauskopf...	E. B. Fred...	L. E. Noland...	H. A. Schuette
University of Washington	A. F. Carpenter...	J. E. Guberlet...	E. J. Saunders...	C. R. Fellers
Worcester...	W. L. Jennings...	B. E. Fernow...	H. J. Gay...	C. F. Meyer
Purdue.....	A. P. Poorman...	A. R. Middleton	G. N. Hoffer...	G. N. Hoffer
Washington University...	W. L. Upson...	H. L. White...	R. S. Glasgow...	H. M. Miller, Jr.
District of Columbia...	W. T. Lee...	E. C. Crittenden...	A. E. Eckhardt...	M. A. Griffith
Texas.....	T. S. Painter...	P. M. Batchelder...	E. C. H. Bantel...	H. L. Lochte
Mayo Foundation...	T. B. Magath...	D. C. Balfour...	A. E. Osterberg...	A. E. Osterberg
N. Carolina...	H. V. Wilson...	W. F. Prouty...	Thorndike Saville	Thorndike Saville
N. Dakota...	E. P. Chandler...	A. G. Leonard...	E. A. Baird...	E. A. Baird
Ames.....	P. E. Brown...	P. Mable Nelson...	J. A. Wilkinson...	G. W. Snedecor
Rutgers.....	P. A. van der Meulen	J. W. Shive...	C. W. Cunningham	T. J. Murray
McGill.....	A. S. Eve...	J. Tait...	A. Keys...	A. Keys
		H. M. MacKay		
Kentucky.....	J. B. Miner...	R. N. Maxson...	M. N. States...	Mariel Hopkins
Idaho.....	W. M. Gibbs...	I. C. Crawford...	C. W. Hungerford	T. M. Dahm
Swarthmore...	E. W. Doeblen...	G. A. Hoadley...	H. J. Creighton...	H. J. Creighton
Oregon.....	H. B. Yocom...	O. Larsell...	W. P. Boynton...	W. D. Smith
Virginia.....	H. E. Jordan...	C. P. Olivier...	B. D. Reynolds...	B. D. Reynolds
Johns Hopkins	P. D. Meader...	G. B. Wislocki...	J. R. Musselman...	W. B. Kouwenhoven
Calif. Institute of Technology	R. A. Millikan...	W. S. Adams...	W. N. Lacey...	R. W. Sorenson
New York University...	H. D. Senior...	G. I. Finlay...	H. W. Stunkard...	H. W. Stunkard
University of Cincinnati	O. C. Von Schlichten	G. D. McLaughlin	S. B. Arenson...	S. B. Arenson

SIGMA XI CLUBS

CHAPTER	PRESIDENT	VICE-PRES.	SECRETARY	TREASURER
Oklahoma....	C. E. Decker...	R. E. Jeffs.....	Wm. Schriever.	Wm. Schriever
Arizona.....	G. H. Cresse...	E. Anderson....	H. B. Leonard...	H. B. Leonard
Southern California....	W. L. Hardin...	.....	P. W. Merrill...	E. E. Chandler
Duluth.....	.....	.....	E. W. Kelly....	.....
Kansas State Agricultural College.....	G. A. Dean....	E. C. Miller....	C. W. Colver...	C. W. Colver
Carleton College.....	C. A. Culver...	P. M. Glasoe...	H. E. Stork....	H. E. Stork
University of Denver.....	T. R. Garth....	R. E. Nyswander	E. A. Engle....	W. H. Hyslop
Oregon State Agricultural College.....	J. E. Simmons...	.....	.....	.....
Michigan Agricultural College.....	G. W. Bissell...	R. P. Hibbard...	R. M. Snyder...	R. M. Snyder
West Virginia University...	A. M. Reese....	J. H. Gill.....	R. P. Davis....	.....
University of Maine.....	Albert Fitch....	J. W. Gowen...	Edith M. Patch	Edith M. Patch
University of Pittsburgh...	K. D. Swartzel..	O. H. Blackwood	Richard Hamer	Richard Hamer
University of Wyoming...	A. F. Vass.....	Philo Hammond	E. B. Payson...	E. B. Payson
University of Florida.....	G. F. Weber...	T. R. Leigh....	F. J. Bacon....	F. J. Bacon
University of Rochester....	J. R. Murlin...	H. L. Alling....	H. L. Alling

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OFFICIAL ANNOUNCEMENTS

Associate membership emblems can be secured only by order from the chapter secretary to the national secretary. All orders must be prepaid. Special order blanks sent on request.

The national secretary is prepared to supply keys at reasonable rates. Information will be sent on request.

PRINTED BLANKS

The General Convention has instructed the secretary to forward to chapters under the following stipulations:

Membership Certificates, stamped with the great seal of the Society. In packages of fifty prepaid, on advance payment of \$2.50 for each package. Please specify carefully whether for active or associate members.

Index Cards, provided a duplicate set be sent for the general index of the Society maintained in the secretary's office. Gratis.

Chapter secretaries are requested to fill out these cards carefully giving **PERMANENT** addresses of the members, and return to the national secretary.

SIGMA XI BANNERS

Chapters may obtain Sigma Xi Banners at the following prices:

Size 3 x 5 — \$ 8.00

4 x 6 — 12.00

5 x 8 — 20.00

CHANGES OF ADDRESS

All changes of address and all other correspondence should be addressed to the secretary of Sigma Xi, Edward Ellery, Union College, Schenectady, N. Y.